

Comprehensive Plan Cost Table Version 12 Costs through May 31, 2017	UAO COST ESTIMATE JULY 2012	EXPENDED TO DATE POST SETTLEMENT 05/31/2017	COST TO COMPLETE REMAINING 2017-2021	TOTAL COST AT COMPLETION IN 5 YEARS	TOTAL COST AT COMPLETION WITH CONTINGENCIES	% Contingency	Cost to complete with contingency	Volume to be Removed (cu. yds)	FUNDING NEEDED 2017	FUNDING NEEDED 2018	FUNDING NEEDED 2019	FUNDING NEEDED 2020	FUNDING NEEDED 2021	SUBTOTAL FUNDING REQUIRED	2022	2023	2024	TOTAL (Cost to Complete Remaining Includes below the line LTM costs)	RFP date	Start	Finish	NOTES
Project Complete in 5 Years																						
MassDEP Funding		\$ 600,000	\$ 1,000,000	\$ 1,600,000	\$ 1,600,000	0%	\$ 1,000,000		\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,000,000				\$ 1,000,000.00				2014-2021 - ETD for 3 years - Needs verification from 3/9/17 meeting - based on EPA comment
USACE Funding		\$ 3,900,000	\$ 8,300,000	\$ 12,200,000	\$ 13,420,000	10%	\$ 9,130,000		\$ 2,750,000	\$ 2,750,000	\$ 2,750,000	\$ 2,750,000	\$ 1,210,000	\$ 9,130,000				\$ 9,130,000.00				Per Corps - \$3.9M (2014-2016), 2.5M (2017-2018) \$1.1M/yr (2019 - 2021)
Pre-Serv Contract (WQMMonit)		\$ 7,500,000	\$ 12,500,000	\$ 20,000,000	\$ 22,000,000	10%	\$ 13,750,000		\$ 2,750,000	\$ 2,750,000	\$ 2,750,000	\$ 2,750,000	\$ 2,750,000	\$ 13,750,000				\$ 13,750,000.00				Assumes \$2.5M/yr - cost provided by Corps
Intertidal	\$ 78,400,763																					
UH Intertidal		\$ -	\$ 39,400,950	\$ 39,400,950	\$ 47,281,140	20%	\$ 47,281,140			\$ 23,640,570	\$ 23,640,570			\$ 47,281,140				\$ 47,281,140.00	12/1/2017	5/1/2018	6/1/2019	Assume work start in 3/18 and is fully funded and east and west sides done simultaneously, totaled using below two items.
Eastern shoreline		\$ -	\$ 30,736,750					35,130														Costs based upon engineers estimate \$875/yard, inc excavation, restoration, T&D -see backup
Western Shoreline		\$ -	\$ 8,662,200					14,437														Costs based upon engineers estimate \$600/yard, incl excavation, restoration, T&D - see backup
Parcel 265		\$ 2,229,750	\$ -	\$ 2,229,750	\$ 2,229,750	0%	\$ -															Not included in UAO estimate
PMC		\$ 438,360	\$ 7,325,060	\$ 7,763,420	\$ 7,763,420	0%	\$ -	460,278						\$ -				\$ -				UAO included this with intertidal volume. CTC includes SES, T&D, restoration, demol.
LH		\$ -	\$ 201,940	\$ 201,940	\$ 242,328	20%	\$ 242,328	230						\$ -				\$ -	12/1/2017	3/1/2018	6/1/2018	Not Contracted. Assumes 230 cu yds from North Street property only
BIB		\$ -	\$ 665,000	\$ 665,000	\$ 731,500	10%	\$ 731,500	760						\$ -				\$ -	5/1/2018	9/30/2018	10/29/2018	Not Contracted. Assumes 760 cubic yards @ \$875/yard
Marsh Island	\$ 3,380,452		\$ 2,282,220	\$ 2,282,220	\$ 2,510,442	10%	\$ 2,510,442							\$ -				\$ -	4/1/2017	8/1/2017	11/1/2017	Work is contracted. Cost from RAC TQMS negotiated proposal June 30 2017 - less management time
Aerovox																						
Aerovox Interim Cap		\$ -	\$ 4,800,000	\$ 4,800,000	\$ 6,240,000	30%	\$ 6,240,000		\$ 6,240,000					\$ 6,240,000				\$ 6,240,000.00	12/1/2017	5/1/2018	7/1/2018	Not Contracted. Assumed 3 ft carbon sand cover (per Corps direction). Temporary solution does not complete final remedy.
Interim Cap LTM			\$ 750,000	\$ 750,000	\$ 900,000	20%	\$ 900,000			\$ 180,000	\$ 180,000	\$ 180,000	\$ 180,000	\$ 720,000	\$ 180,000.00			\$ 900,000.00				Not Contracted. Assumed annual benthic and sampling of cover and reporting. No replacement costs.
Cell 1	\$ 23,958,630																					
Cell 1 Interim Remedy			\$ 1,000,000	\$ 1,000,000	\$ 1,200,000	20%	\$ 1,200,000			\$ 1,000,000	\$ 50,000	\$ 50,000	\$ 100,000	\$ 1,200,000				\$ 1,200,000.00	1/1/2018	6/1/2018	6/1/2022	Not Contracted. Assumed temporary AS/SVE for reduction of CVOCs.
Full Demob	\$ 7,877,325	\$ -	\$ 5,785,460	\$ 5,785,460	\$ 7,810,370	35%	\$ 7,810,370				\$ 3,250,000	\$ 3,250,000	\$ 1,310,370	\$ 7,810,370				\$ 7,810,370.47	10/1/2018	1/1/2019	1/1/2023	ETC from May 2016 Jacobs proposal. Contingency based upon undefined future status and necessary improvement of Areas C and D.
Dredge & Fill LHCC	\$ 39,838,604																					
Construct CAD Cell		\$ 9,563,000	\$ -	\$ 9,563,000	\$ 9,563,000	0%	\$ -							\$ -								Complete - UAO costs for all work related to CAD Cell, less the \$11.3M from EPA HQ (need to verify if paid back)
Dredge and Fill LHCC - Jacobs		\$ 14,155,772	\$ 14,155,772	\$ 14,155,772	\$ 14,155,772	0%	\$ -							\$ -								Complete
Pre-BV - UH & LH to LHCC Mechanical - Jacobs		\$ 4,683,907	\$ 462,280	\$ 5,126,187	\$ 5,126,187	0%	\$ 462,280			\$ 462,280				\$ 462,280				\$ 462,279.84				Work is complete, pending final invoicing. UH and LH Mech dredge - MU 25, 26, silt curtains, Moby Dick.
Post BV - UH & LH to LHCC Mechanical - Jacobs (37 CAD)			\$ 1,060,000	\$ 1,060,000	\$ 1,166,000	10%	\$ 1,166,000				\$ 3,591,942			\$ 3,591,942.00				\$ 3,591,942.00				One plant 120 days (37CAD), includes current Jacobs costs
Dredge and Fill LHCC - BV		\$ -	\$ 14,915,983	\$ 14,915,983	\$ 14,915,983	0%	\$ -				\$ 18,700,000			\$ 18,700,000				\$ 18,700,000.00	6/1/2017	5/1/2018		Per USACE Email 3/16/17 changed from \$18M to \$17M. Fixed Cost Contract estimate
Survey Contract - BV			\$ 700,000	\$ 700,000	\$ 700,000	0%	\$ -			\$ 700,000				\$ 700,000				\$ 700,000.00	5/1/2017	5/1/2017	5/1/2018	Per USACE Email 3/16/17 changed from \$800k to \$700k. Based on award to Bryant
Between the Bridges Subtidal		\$ -	\$ 2,573,520	\$ 2,573,520	\$ 2,830,872	10%	\$ 2,830,872	12,868		\$ 2,830,872				\$ 2,830,872				\$ 2,830,872.00	5/1/2018	11/2/2018	10/29/2018	Negotiated and Awarded, added fee in Rev'd
Dredge Cleanup Piles - Jacobs			\$ 3,380,000	\$ 3,380,000	\$ 3,716,000	10%	\$ 3,716,000	16,900		\$ 3,716,000				\$ 3,716,000				\$ 3,716,000.00	2/1/2018	6/1/2018	11/1/2018	10% cleanup passes, based on BV CTC
Cap LHCC	\$ 5,780,303	\$ -	\$ 5,100,000	\$ 5,100,000	\$ 5,992,500	18%	\$ 5,992,500				\$ 5,992,500			\$ 5,992,500				\$ 5,992,500.00	11/1/2018	12/1/2019	1/1/2020	Cost estimate from EPA. Cost used to be revised, requires a small group meeting discussion prior to cost estimate revision.
MU-22			\$ 102,720	\$ 102,720	\$ 112,992	10%	\$ 112,992	514						\$ 112,992				\$ 112,992.00				Includes 4 inches overdredge (513.6 yds to LHCC, avg conc of removed material is 55.6 ppm)
MU-26			\$ 1,089,660	\$ 1,089,660	\$ 1,089,660	10%	\$ 1,089,660	4,953						\$ 1,089,660				\$ 1,089,660.00				Includes 4 inches overdredge (4953 yds to LHCC, avg conc of removed material is 80.4 ppm)
MU-29			\$ 2,821,984	\$ 2,821,984	\$ 2,821,984	10%	\$ 2,821,984	12,827						\$ 2,821,984				\$ 2,821,984.00				Includes 4 inches overdredge (12827.2 yds to LHCC, avg conc of removed material is 56.3 ppm)
PMC			\$ 1,836,800	\$ 1,836,800	\$ 2,020,480	10%	\$ 2,020,480	22,684						\$ 2,020,480				\$ 2,020,480.00				Includes 4 inches overdredge (22684 yds to LHCC, avg conc of removed material is 80.4 ppm)
Area R			\$ 3,685,440	\$ 3,685,440	\$ 4,053,984	10%	\$ 4,053,984	18,427						\$ 4,053,984				\$ 4,053,984.00				Includes 4 inches overdredge (18427.2 yds to LHCC, avg conc of removed material is 101.6 ppm)
Area L			\$ 2,196,000	\$ 2,196,000	\$ 2,415,600	10%	\$ 2,415,600	10,980						\$ 2,415,600				\$ 2,415,600.00				Includes 4 inches overdredge (10980.2 yds to LHCC, avg conc of removed material is 98.3 ppm)
CUBIC YARDS TO LHCC - 70386.2																						
Hydraulic Dredging	\$ 154,458,091	\$ 51,365,786	\$ -	\$ 51,365,786	\$ 51,365,786	0%	\$ -							\$ -								2014 through 2016 dredging less \$12M, PMC, Parcel 265, and fixed costs
Temporary Pipeline Relo		\$ -	\$ 1,235,659	\$ 1,235,659	\$ 1,235,659	0%	\$ 1,235,659							\$ -								Negotiated and Awarded
Capping DDA		\$ -	\$ -	\$ -	\$ -	20%	\$ -							\$ -								Capping of DDA cost estimated from ESD 4
Sand Cover		\$ -	\$ 2,925,000	\$ 2,925,000	\$ 3,217,500	10%	\$ 3,217,500			\$ 3,217,500				\$ 3,217,500				\$ 3,217,500.00				This is an assumed volume of 100,000 cu. mechanical placement - ASSUMES ONLY 25% COVER USED - ORIGINALLY \$11.7 AND 12.87 W/C
LTM Restoration			\$ 550,000	\$ 550,000	\$ 550,000	10%	\$ 550,000			\$ 275,000				\$ 550,000				\$ 550,000.00				Year 1 after restoration and Year 5 - Not previously included.
Maintenance of Salt Marsh Restoration	\$ 580,163	\$ -	\$ 689,052	\$ 689,052	\$ 723,504	5%	\$ 723,504				\$ 80,000			\$ 80,000				\$ 80,000.00				Cost to Complete is escalated UAO cost (3.5%)
Sealood Monitoring	\$ 721,387	\$ -	\$ 579,290	\$ 579,290	\$ 579,290	0%	\$ 579,290			\$ 579,290				\$ 579,290				\$ 579,289.63				Costs from MassDEP
Site Wide Benthic LTM	\$ 818,703	\$ 536,021	\$ 550,000	\$ 1,086,021	\$ 1,140,322	5%	\$ 577,500			\$ 577,500				\$ 577,500				\$ 1,155,000.00				Cost to Complete is escalated UAO cost (3.5%), assume 1/5yr
Fixed Costs	\$ 54,927,518																					Jacobs Fixed Costs.
Project Management and Admin		\$ 15,603,950	\$ 7,152,011	\$ 22,755,961	\$ 25,031,557	10%	\$ 7,867,212			\$ 524,481	\$ 1,573,442.43	\$ 1,573,442.43	\$ 1,573,442.43	\$ 1,573,442.43	\$ 6,818,251	\$ 686,126.30		\$ 7,484,376.81				
Site Ops and Warehouse		\$ 2,888,254	\$ 4,385,244	\$ 7,273,497	\$ 8,000,847	10%	\$ 4,823,768			\$ 321,585	\$ 864,753.62	\$ 864,753.62	\$ 864,753.62	\$ 864,753.62	\$ 4,180,599	\$ 484,598.10		\$ 4,665,197.14				
Air Monitoring		\$ 1,075,808	\$ 854,105	\$ 1,929,913	\$ 2,122,904	10%	\$ 939,515			\$ 187,903	\$ 187,903	\$ 187,903	\$ 187,903	\$ 187,903	\$ 751,612	\$ 168,485.39		\$ 920,097.45				Air Monitoring for 2017 is funded.
Hybrid Dredging																						
Cable Crossing			\$ 25,746,215	\$ 25,746,215	\$ 28,320,837	10%	\$ 28,320,837															Based on initial proposal for TQMS (55,000 yds), revised - see subtidal back up - includes Mob/Winterization-already funded
Area O			\$ 15,093,352	\$ 15,093,352	\$ 16,602,687	10%	\$ 16,602,687	29,361			\$ 16,602,687			\$ 16,602,687				\$ 16,602,687.46	11/1/2017	3/19/2018	5/28/2018	Includes 4 inches overdredge (29360.5 yds, avg conc of removed material is 266.5 ppm)
Area N			\$ 7,198,882	\$ 7,198,882	\$ 7,918,770	10%	\$ 7,918,770	14,004			\$ 7,918,770			\$ 7,918,770				\$ 7,918,770.26	11/1/2017	6/4/2018	7/19/2018	Includes 4 inches overdredge (14003.7 yds, avg conc of removed material is 113.3 ppm)
Area H			\$ 9,567,305	\$ 9,567,305	\$ 9,567,305	10%	\$ 9,567,305	16,919			\$ 9,567,305			\$ 9,567,305				\$ 9,567,305.00	11/1/2017	7/1/2018	8/17/2018	Includes 4 inches overdredge (15919 yds, avg conc of removed material is 197.4 ppm)
Area I			\$ 3,940,187	\$ 3,940,187	\$ 3,940,187	10%	\$ 3,940,187	6,968			\$ 3,940,187			\$ 3,940,187				\$ 3,940,187.19	11/1/2017	6/20/2018	9/7/2018	Includes 4 inches overdredge (6967.9 yds, avg conc of removed material is 75.1 ppm) Max conc exceed 700 ppm in some samples
Area P			\$ 4,121,705	\$ 4,121,705	\$ 4,121,705	10%	\$ 4,121,705	7,289			\$ 4,121,705			\$ 4,121,705				\$ 4,121,705.31	11/1/2017	9/10/2018	9/26/2018	Includes 4 inches overdredge (7288.9 yds, avg conc of removed material is 58.4 ppm) Max conc exceed 1,000 ppm in some samples
Area S			\$ 11,084,763	\$ 11,084,763	\$ 11,084,763	10%	\$ 11,084,763	19,603			\$ 11,084,763			\$ 11,084,763				\$ 11,084,762.85	11/1/2017	9/27/2018	11/15/2018	Includes 4 inches overdredge (11084.7 yds, avg conc of removed material is 75.3 ppm) Max conc exceeds 500 ppm in some samples
Area T			\$ 1,696,431	\$ 1,696,431	\$ 1,696,431	10%	\$ 1,696,431	3,000			\$ 1,696,431			\$ 1,696,431				\$ 1,696,431.00	11/1/2017	11/12/2018	11/19/2018	Assumes 3000 cubic yards
MU-31			\$ 1,473,011	\$ 1,473,011	\$ 1,473,011	10%	\$ 1,473,011	2,605			\$ 1,473,011			\$ 1,473,011				\$ 1,473,011.04	11/1/2017	11/20/2018	11/25/2018	Includes 4 inches overdredge (2604.9 yds